

**REMARKS**

Applicants respectfully request reconsideration of this RCE application in view of the foregoing amendment and following remarks.

**Status of the Claims**

Claims 213-228 are pending in this application, of which claims 213 and 221 are independent. All of the pending claims stand rejected. By this amendment, claims 213 and 221 are amended. No new matter has been introduced by this amendment.

**Rejection under 35 U.S.C. §112**

Claims 221-228 have been rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. The Office Action indicates that the phrase "a digital information waveform encapsulated in a series of RF sub-carriers" in claim 221 is new matter. Applicants disagree.

In-band on-channel (IBOC) is a known method of transmitting digital radio and analog radio broadcast signals simultaneously on the same frequency. By utilizing additional digital subcarriers or sidebands, digital information is "piggybacked" on a normal AM or FM analog signal, thus avoiding any complicated extra frequency allocation issues. The instant application discloses in numerous places, the use of IBOC in connection with the invention claimed. Thus, the reference to IBOC is a disclosure of "a digital information waveform encapsulated in a series of RF sub-carriers." The application need not verbatim use the words in the claim, it must disclose what is claimed. The supporting disclosure is thus clearly present in numerous places such as, for example:

IBOC technology has the ability to create a "hybrid" signal that can simultaneously send analog ("audio") and digital data. [Page 3, lines 1-2]  
Further embodiments related to a data-cast provide a methodology and a system for packaging the data and the audio for broadcast on an IBOC signal. This

provides a physical relationship between supplemental digital data and analog audio. [Page 12, lines 3-5]

Create the datacast advertisement in compliance with digital data IBOC broadcast standards. [Page 22, lines 14-15]

The primary function of the black box is to prepare datacast elements in a manner that constitutes a datacast and then interface with an IBOC encoding device to dispense that datacast. [Page 25, lines 5-8]

Formatting and timing directives are used by the IBOC encoding device and the IBOC signal receiver to render the data in a fashion that meets the goal of producing the desired datacast effect, enable user interaction and ultimately, commerce transactions. [Page 27, lines 9-11]

As described in detail in the foregoing, the present invention embodies a series of sub-systems (cooperating hardware and software) that allow a broadcaster to utilize IBOC technology to broadcast supplemental digital data (“data”) along with the analog audio (“audio”) which, in turn, enhances the value of a radio broadcast. [Page 92, lines 6-9]

The present invention is also important because it provides a useful commercial utility, radio commerce, to an existing IBOC technology. Currently the only commercial application for IBOC is the hybrid delivery of digital audio broadcasting. Commercial initiatives to increase the sound quality of an audio broadcast are underway by transmission equipment manufacturers and iBiquity Digital. This invention enables and makes commercial use of IBOC’s data transmission capabilities that are currently unrealized. [Page 95, lines 4-9]

Another embodiment of the present invention entails a system for providing data on an in-band, on-channel (IBOC) FM digital audio broadcast. [Page 106, lines 13-14]

Accordingly, Applicants believe that the disclosure of IBOC itself necessarily identifies to a skilled artisan in the field “a digital information waveform encapsulated in a series of RF sub-carrier” as recited in claim 221 in the same way that a simple reference to “AM radio” would be a sufficient disclosure of transmitting information using a carrier wave by varying the strength of the transmitted signal in relation to the information being sent, and a simple reference to “FM radio” would be a sufficient disclosure of transmitting information using a carrier wave by

varying its frequency. Similarly, the disclosure makes clear that the invention is using the IBOC method of transmission, it is not creating a method of transmission that would supplant IBOC.

Reconsideration and withdrawal of the rejections of claims 221-228 have been rejected under 35 U.S.C. §112, first paragraph, is respectfully requested.

**Rejection under 35 U.S.C. §§ 102 and 103**

Claims 213-220 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,192,340 to Abecassis (“Abecassis”) in view of U.S. Patent No. 5,615,227 to Schumacher, Jr., et al. (“Schumacher”).

First of all, Applicants incorporate by reference the arguments made in the submission of May 19, 2008 which was filed with an RCE and reasserts the same arguments with regard to the pending claims.

Secondly, independent claims 213 and 221 have been amended to further clarify the invention. For example, amended claim 1 now recites:

213 (CURRENTLY AMENDED). A method comprising:

receiving from at least one of multiple broadcasters broadcast schedule information identifying when broadcast data need to be transmitted over specific broadcast channels at predetermined times from the at least one of multiple broadcasters to an end user;

analyzing the received broadcast schedule information and, based upon the analysis, identifying supplemental digital data to be provided to a broadcaster from among the at least one of the multiple broadcasters, the supplemental digital data being correlated to broadcast data such that both can concurrently be provided by the broadcaster; and

providing the supplemental digital data to the broadcaster prior to the predetermined time for broadcast of the broadcast data as specified in the broadcast schedule information so that the broadcaster can concurrently broadcast both the broadcast data and the correlated supplemental digital data to the end user at the predetermined time as part of an in-band, on-channel transmission. [Emphasis added]

Support for the amendment may be found, e.g., paragraphs [0009] and [0010] of the corresponding published application (i.e., U.S. Pub. No. 2002/0141491 A1). One of the aspects of the present invention is directed to an algorithm to determine how to package broadcast

contents together (e.g., combining broadcast data and supplemental digital data correlated to the broadcast data). In particular, amended claim 213 clarifies that the broadcaster (i.e., not an end user or a service provider) determines when the broadcast data will be transmitted.

The method of amended claim 212 “receives” broadcast schedule information from a broadcaster that identifies when specific broadcast data need to be transmitted over specific broadcast channels to an end user (e.g., a listener). For example, a broadcast schedule information may be received from a radio station indicating that a talk show about cooking is scheduled between 9 A.M. and 10 A.M. tomorrow. The method of amended claim 212 then “analyzes” the received broadcast schedule information and “identifies” supplemental digital data for the broadcaster. For example, an analysis of the broadcast schedule information regarding the talk show about cooking may identify supermarket items that will be on sale and recipes as supplemental digital data correlated to the talk show. The method of amended claim 212 then “provides” the supplemental digital data to the broadcaster prior to the predetermined time (i.e., 8 A.M. tomorrow which is an hour prior to the beginning of the talk show). As a result, the broadcaster may concurrently broadcast the broadcast data (i.e., talk show about the cooking) and the correlated supplemental digital data (i.e., supermarket items and recipe) to the listener on time (i.e., between 9 A.M. and 10 A.M.).

As Applicants thoroughly explained in the May 19, 2008 Amendment, Abecassis discloses integration of radio-on-demand with real-time information, such as stock market reports, based upon user preference. The Office Action refers to several portions of Abecassis in rejecting the pending claims. For example, the Office Action asserts, *inter alia*, that:

Abecassis teaches (independent claim 213) a method comprising:  
receiving ... (a plurality of providers 411-413, providing service by radio 404, col. 11, lines 1-19 and Fig. 4) broadcast schedule information (Providing a broadcast schedule, col. 16 lines 40-46)...

analyzing ... (applying the schedulel [sic] scheduling, music and information preferences, col. 17, lines 37-42 and col. 20 lines 23-52) ... identifying supplemental digital data (*information* 755, col. 20 lines 59-61 and Fig. 7)...

providing ... (a radio-on-demand provider system 411, col. 11 lines 1-6, 12-19 and 22-44) ... for broadcast of the broadcast data as specified in the broadcast schedule information (col. 16, line 40-46)...<sup>1</sup>

As Applicants understand it, however, there is nothing in Abecassis including the portions cited by the Examiner as indicated above that discloses a combined teaching of the present invention where a service provider (i.e., not an end user) can actually choose supplemental digital data for the broadcaster based on an analysis of the received broadcast data from the broadcaster. It appears that the Examiner takes similar but isolated terms in Abecassis such as “receiving”, “analyzing” and “providing” to equate the present invention that actually establishes a unique algorithm for specific content service that is substantially different from the radio-on-demand system of Abecassis.

For example, a portion of Abecassis defines its radio-on-demand system as follows:

A radio-on-demand provider system 411 comprises, for example,: i) communication technologies 421 for establishing a plurality of communication streams to a plurality of Multimedia Players 431-438, ii) processing hardware and software 422 for retrieving from a Multimedia Player an end user's music information, and technical preferences, and for automatically selecting, for each of the participating end users, audio and information that is responsive to the preferences, iii) mass storage random access memory devices 423 for storing one or more music and information databases (“audiobase”), and iv) processing hardware and software 424 for maintaining accounting and support services in connection with service provided. (col. 11, lines 31-44)

The radio-on-demand provider system of Abecassis is NOT configured to provide any schedule information to anyone, and is NOT configured to receive any schedule information from broadcasters. Moreover, the radio-on-demand provider system of Abecassis does NOT determine any supplemental digital data as required by the inventive aspect of claim 213 as amended.

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<sup>1</sup> Page 2-3 of the Office Action.

Schumacher is cited as disclosing concurrently broadcasting both the broadcast data and the correlated supplemental digital data.<sup>2</sup> However, as Applicants understand it, there is nothing in Schumacher that teaches the inventive aspect of the present application discussed above, e.g., where a service provider can actually choose supplemental digital data for the broadcaster based on an analysis of the received broadcast data from the broadcaster. For example, Schumacher discloses a spread spectrum technology for transmitting data within a radio frequency the ideas of which go back as far as the 1940's or further. In contrast, the present invention is not directed to a transmission technology but rather to a data service technology that uses special algorithms to determine how to package content together.

Accordingly, each of claims 213 and 221 as amended is believed neither anticipated by nor rendered obvious in view of the references cited by the Examiner (i.e., Abecassis and Schumacher), either taken alone or in combination, for at least the reasons discussed above.

Reconsideration and withdrawal of the rejections of claims 213 and 221 under 35 U.S.C. §103(a) is respectfully requested.

Applicants have chosen in the interest of expediting prosecution of this patent application to distinguish the cited documents from the pending claims as set forth above. However, these statements should not be regarded in any way as admissions that the cited documents are, in fact, prior art. Also, Applicants have not individually addressed the rejections of the dependent claims because Applicants submit that the independent claims from which they respectively depend are in condition for allowance as set forth above. Applicants however reserve the right to address such rejections of the dependent claims should such be necessary.

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<sup>2</sup> Page 3 of the Office Action.

Applicants believe that the application as amended is in condition for allowance and such action is respectfully requested.

**AUTHORIZATION**

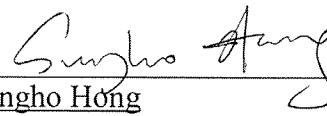
No petitions or additional fees are believed due for this amendment and/or any accompanying submissions. However, to the extent that any additional fees and/or petition is required, including a petition for extension of time, Applicant hereby petitions the Commissioner to grant such petition, and hereby authorizes the Commissioner to charge any additional fees, including any fees which may be required for such petition, or credit any overpayment to Deposit Account No. 13-4500 (Order No. 4232-4002). A DUPLICATE COPY OF THIS SHEET IS ENCLOSED.

An early and favorable examination on the merits is respectfully requested.

Respectfully submitted,  
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Dated: November 20, 2008

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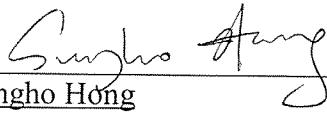
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